LC80i-IP
LC265i-IP

Active In-Wall/In-Ceiling Speakers

Owner's Manual

polkaudio®

LC*i*-IP SERIES

ENGLISH

IMPORTANT SAFETY INSTRUCTIONS READ BEFORE OPERATING EQUIPMENT

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves,or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
15. WARNING: To reduce the risk of fire or electric shock, this apparatus should not be exposed to rain or moisture and objects filled with liquids, such as vases, should not be placed on this apparatus.
16. To completely disconnect this equipment from the mains, disconnect the power supply cord plug from the receptacle.
17. The main plug of the power supply cord shall remain readily operable.

WARNING

To prevent injury, this apparatus must be securely attached to the ceiling/wall in accordance with the installation instructions.

CAUTION
RISK OF ELECTRIC SHOCK DO NOT OPEN

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK) NO USER-SERVICEABLE PARTS INSIDE REFER SERVICING TO QUALIFIED SERVICE PERSONNEL

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated dangerous voltage within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

Product Disposal - Certain international, national and/or local laws and/or regulations may apply regarding the disposal of this product. For further detailed information, please contact the retailer where you purchased this product or the Polk Audio Importer/Distributor in your country. A listing of Polk Audio Importer/Distributors can be found on the Polk Audio website www.polkaudio.com or by contacting Polk Audio at 5601 Metro Drive, Baltimore, Maryland 21215, USA— Phone: +1 410 358-3600.

TAKE INVENTORY

Inside each LC*i*-IP speaker container, you should find the following:

1. One LC*i*-IP speaker
2. Performance Optimization Wizard – CD-ROM
3. Mating connectors for amplifier's power section
4. Mounting template
5. Paint mask
6. Grille
7. LC*i*-IP manual
8. Laminated configuration setup card
9. Registration card

Note: If you are setting up LC*i*-IP speakers to be controlled via an IP-network such as NetStreams™, you will have to purchase a network decoder card. The network decoder card is sold separately.

Important Note: If anything is missing or damaged, or if your LC*i*-IP speaker fails to operate, notify Polk Audio Installer Support Services immediately at 800-377-7655.

GENERAL DESCRIPTION

Polk Audio LC*i*-IP ultra high performance loudspeakers are among the world's first active IP in-wall and in-ceiling loudspeakers. They were created for IP-networked systems but are also compatible with analog systems. A network decoder card (sold separately), built-in Digital Signal Processor (DSP) and the Performance Optimization Wizard enables every LC*i*-IP speaker to be set up for maximum performance in any room environment. What's more, LC*i*-IP speakers already come with an award-winning reputation, because they use the same driver technologies as Polk Audio's award winning high-end LS*i* Series.

The built-in DSP controls the electronic crossover, frequency equalization, bass enhancement and room optimization. Performance Optimization Wizard software, which integrators can use via a USB port and a PC, or on the internet through a network such as NetStreams™, optimizes each speaker for its location and room environment. Depending on the speaker and its location, and the configuration of the room and its acoustics, you may be asked to take a series of measurements, which you would then input into the Performance Optimization Wizard.

ACTIVE IP LOUDSPEAKER FEATURES

- With an open architecture network decoder card such as the StreamNet™ card and an Ethernet cable, integration with any system capable of streaming packet-switched audio in WAV or MP-3 format and TCP-IP control is possible.
- Pure digital signal all the way to the power amplifier outputs, with no losses and superb fidelity.
- Speakers automatically announce themselves to an open architective network via a network decoder card.

Self Amplified

- Amplifier at speaker minimizes losses associated with long runs of cable and passive crossover parts, creating higher fidelity.
- Efficient, cool running digital amplifiers.
- Bi-amplified (LC265*i*-IP is tri-amplified) with electronic crossover minimizes power loss and phase shift for better sound.
- High Power for incredible dynamic range.
- Powered by 48V DC local power supply (sold separately).

Built-In DSP

- DSP allows unprecedented room optimization EQ for sound quality that can exceed free-standing speakers.

Peformance Optimization Wizard

- Use the Performance Optimization Wizard software with a PC connected via a mini USB port located on the front baffle of each speaker, or through the internet when the speakers are used in an IP network via a network decoder card. The software's user interface makes the speaker position and room acoustics optimization virtually foolproof.

LC*i*-IP Speaker Technology:

- Foamed Polypropylene Dynamic Balance™ Cones (LC265*i*-IP): stiff and yet surprisingly lightweight-20% lighter than conventional polypropylene and 35% lighter than aluminum cones for spectacular midrange clarity, punchy bass and high efficiency.
- Casket Basket®: composite driver baskets keep moving parts in rigid alignment and damps performance-robbing resonance.
- The LC265*i* was the first in-wall speaker to feature the patented Power Port™ bass venting system for superior bass response with low distortion.
- Available Performance Enclosures deliver consistent room-to-room performance, improves bass and sound transmission.
- Round model (LC80*i*-IP) features 15° Driver Offset for better midrange clarity and imaging anywhere in the room.
- Ring Radiator tweeters (the same tweeters used in the LS*i* Series) for smooth, extended highs with incredible accuracy and astonishing detail.

POWER RATINGS

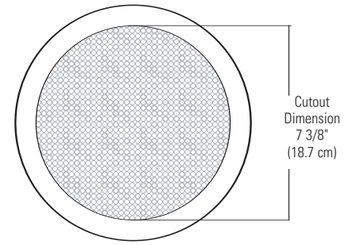
LC265*i*-IP—200W FTC/speaker with < 0.5% THD+N (25W tweeter 4 Ohms, 75W mid 8 Ohms, 100W woofer 8 Ohms)
LC80*i*-IP—100W FTC/speaker with < 0.5% THD+N (25W tweeter 4 Ohms, 75W mid 4 Ohms)

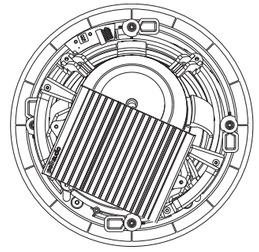
LC265*i*-IP POWER REQUIREMENTS PER SPEAKER

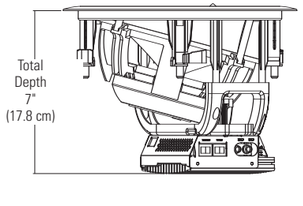
Voltage Input: 48VDC
Current Draw: 4.5A

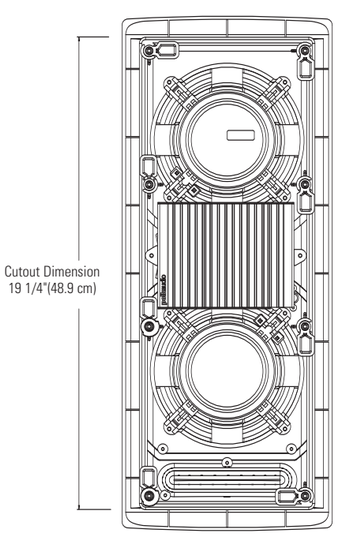
LC80*i*-IP POWER REQUIREMENTS PER SPEAKER

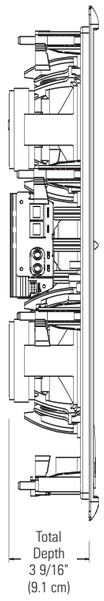
Voltage Input: 48V or 28VDC
Current Draw: 2.3A@48V or 3.8A@28V











LC*i*-IP SERIES SPECIFICATIONS

Model	LC80*i*-IP
Freq. Response	variable
Freq. Response -3dB Limit	variable
Analog Audio Signal Voltage Input (Line-Level)	< 2V RMS
Amplifier SNR	> 90dB
Firmware Upgradeable	yes
Protection	thermal, short-circuit, current overdraw, clipping compresser/limiter
Drive Unit Mid-Bass	1–8"(20.3cm) mineral filled polypropylene cone, rubber surround
Tweeter	1" (2.5cm) ring radiator in swivel mount
Outside Dimensions	10 3/4" Dia (27.3cm)
Cutout Dimensions	7 3/8" (18.7cm)
Mounting Depth (with1/2" drywall)	6 1/2" (16.51cm)
Speaker Weight	4.8 lbs.

Model	LC265*i*-IP
Freq. Response	variable
Freq. Response -3dB Limit	variable
Analog Audio Signal Voltage Input (Line-Level)	< 2V RMS
Amplifier SNR	> 90dB
Firmware Upgradeable	yes
Protection	thermal, short-circuit, current overdraw, clipping compresser/limiter
Drive Unit Mid-Bass	1–6.5"(16.5cm) aerated polypropylene cone, rubber surround 1–6.5"(16.5cm) aerated polypropylene cone, rubber surround
Tweeter	1" (2.5cm) ring radiator in swivel mount
Outside Dimensions	8 1/2" X 20 7/8" (21.59cm X 53.04cm)
Cutout Dimensions	7 1/4" X 19 1/4" (18.42cm X 48.90cm)
Mounting Depth (with 1/2" drywall)	3 1/16" (7.78cm)
Speaker Weight	8.7 lbs.

INHERENT DELAY

Inherent delay for each speaker is:

CFG A B -2.5 milliseconds

CFG A B -4.4 milliseconds

Any other delay is from the MRAV.

INSTALLING LC*i*-IP SPEAKERS

INSTALLATION RECOMMENDATION FOR OPTIMUM PERFORMANCE

Note: Polk Audio performance enclosures are sold separately.

Polk Audio Performance Enclosures offer the best possible sound quality with pre-construction and major renovation installations. They are perfect volume cabinets that provide LC*i*-IP speakers with the ideal volume and internal damping material for optimum bass performance. They are constructed of rigid MDF and extensively braced to ensure that all of the speaker's energy works to produce tight, clean, low distortion bass. Polk provides brackets, gaskets and all the hardware you need to do a quick and rattle-free installation. LC*i*-IP Performance Enclosures guarantee the most consistent, dynamic, full-spectrum sound with superior bass extension. As an added bonus, homeowners will enjoy superior room-to-room sound isolation.

OTHER OPTIONS

Better Sound
When you can't install a Performance Enclosure but want to get better bass, install fire breaks above and below the speaker position to make an ideal-volume enclosure. Also, a layer of fiberglass or Dacron® behind the speaker helps.
Note: Leave space around the speaker's amplifier; insulating material must not come in contact with the amplifier.

Important Note: If installing LC*i*-IP speakers in an external wall, the operating ambient temperature of the speakers is 0-50° C (32-122° F). For most types of construction, the external walls will be insulated, **but it is important that insulation does not come in contact with the speaker's amplifier.**

Pre-construction Brackets are available to locate the speaker and tie off wires before the drywall installers finish their work. Order the LC*i*-IP Pre-Construction Brackets by contacting Polk Audio's Sales Department at 800-638-7276.

Good Sound
Cut a hole for the speaker, feed the wires, and simply drop the speaker in. Polk Audio's unique, rotating cams secure the speaker safely with no extra assembly or mess. LC*i*-IP Loudspeakers are designed to outperform any other custom install speaker, even when they're simply dropped into the wall or ceiling.

WIRE RECOMMENDATIONS

Network Line
Shielded Cat-5 cable with RJ-45 connectors. Wiring termination convention should be the same at both ends of the cable.

COMM Line
Shielded Cat-5 cable with RJ-45 connectors. Wiring termination convention should be the same at both ends of the cable.

Analog Line
Low capacitance multi-stranded RCA shielded cable.

Cable runs up to 100 feet should have a capacitance of 20pF/ft. For cable runs greater than 100 ft. call Customer Serivce at 1-800-377-7655.

USB Connection
USB 1.1, 5-wire, USB to mini-USB cable.

Power Lines
These recommendations are for all connections from the power supply to each speaker:

	Wire gauge/ # of Conductors	Wire Length
Optimal	14/4	1'
↓	↓	↓
Acceptable	16/2	150'

Cable Installation Tips

- Observe the proper polarity at each connector.
- Wall insulation should never come in contact with the amplifier located on the back of each speaker.
- Never kink or bend any cable, nor should any cable interfere with other cables.
- Never try to make a short cable reach, ever.
- Avoid long cable runs if possible — the shorter the cable, the better the sound quality. Do, however, ensure that your cables are long enough.
- Cable should be at least 3 feet away from fluorescent light boxes and other sources of electrical interference.
- Label both ends of each cable.
- Always keep AC power cords and analog power cords separate.

CONNECTION AND CONTROL OPTIONS MATRIX

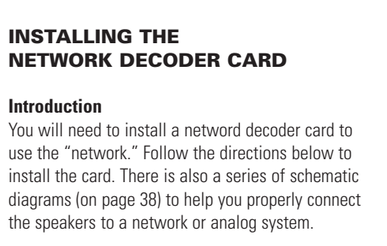
	Speaker	Input			Switch Setting			Control	
1a: NETWORK PAIR (Control on Left)		CH 1	CH 2	Network	Control	CFG	Channel	Comm	USB
	Left Speaker			x	Y	B	1		x
	Right Speaker				N	B	2	x	
1b: NETWORK PAIR (Control on Right)		CH 1	CH 2	Network	Control	CFG	Channel	Comm	USB
	Left Speaker				N	B	1	x	
	Right Speaker			x	Y	B	2		x
2: NETWORK (Independent Control)		CH 1	CH 2	Network	Control	CFG	Channel	Comm	USB
	Left Speaker			x	Y	B	1		x
3a: ANALOG PAIR (Control on Left)		CH 1	CH 2	Network	Control	CFG	Channel	Comm	USB
	Left Speaker	x	x		Y	B	1		x
	Right Speaker				N	B	2	x	
3b: ANALOG PAIR (Control on Right)		CH 1	CH 2	Network	Control	CFG	Channel	Comm	USB
	Left Speaker				N	B	1	x	
	Right Speaker	x	x		Y	B	2		x
4a: ANALOG PAIR (Control on Left)		CH 1	CH 2	Network	Control	CFG	Channel	Comm	USB
	Left Speaker	x			Y	A	1		x
	Right Speaker		x		N	A	2	x	
4b: ANALOG PAIR (Control on Right)		CH 1	CH 2	Network	Control	CFG	Channel	Comm	USB
	Left Speaker	x			N	A	1	x	
	Right Speaker		x		Y	A	2		x
5a: ANALOG (Independent Control when used with 3a or 3b)		CH 1	CH 2	Network	Control	CFG	Channel	Comm	USB
	Speaker	x			Y	B	1		x
5b: ANALOG (Independent Control when used with 4a or 4b)		CH 1	CH 2	Network	Control	CFG	Channel	Comm	USB
	Speaker	x			Y	A	1		x

INSTALLING THE NETWORK DECODER CARD

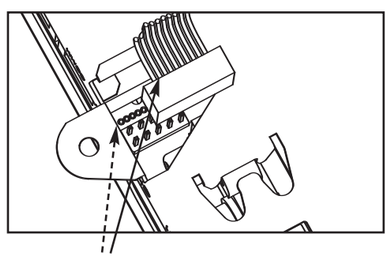
Introduction
You will need to install a netword decoder card to use the "network." Follow the directions below to install the card. There is also a series of schematic diagrams (on page 38) to help you properly connect the speakers to a network or analog system.

Note: A network decoder card is not needed to use the analog RCAs.

Step 1: Disconnect all cables.
Step 2: Remove the (4) screws holding the heat sink to the amplifier housing. Set the screws safely aside.
Step 3: Remove the amplifier and loose cables from the amplifier housing.
Step 4: Remove the two screws from the two metal standoffs located on the PCB.
Step 5: Install the network decoder card on the standoffs, mating the two sides of the 40-pin connector. Press down and ensure that the card snaps onto the two plastic standoffs.
Step 6: Secure the network decoder card by reinserting the two standoff screws into the two metal standoffs.
Step 7: Reinstall the amplifier onto the amplifier chassis (reversing steps 1, 2 & 3).



Note: Illustration shows orientation of ribbon connector to silkscreen marking on PCB.

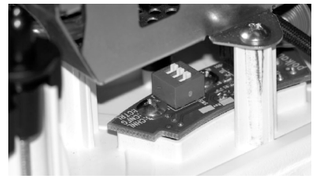


Note: Illustration shows orientation of ribbon connector to silkscreen marking on amplifier.

CONNECTING LC*i*-IP SPEAKERS TO A NETWORK OR ANALOG SYSTEM

This is the list of speaker connection options, which are shown schematically on pages 39-43:

1a. Network pair (Control on Left)
1b. Network pair (Control on Right)
2. Network (Independent Control)
3a. Analog pair (Control on Left)
3b. Analog pair (Control on Right)
4a. Analog pair (Control on Left)
4b. Analog pair (Control on Right)
When using a Center Channel with an analog pair
5a. Analog (Independent control when used with either Hookup 3a or 3b)
5b. Analog (Independent control when used with either Hookup 4a or 4b)
Important Note: Switch settings are located on the back of the speaker baffle.



Reset Button Reminder

Note: Each speaker has a RESET BUTTON, which is accessible through a clearly-marked hole on the front of the speaker.
Engage the RESET BUTTON whenever you:
- Reconfigure the switch settings.
- Update the firmware on the network decoder card.
- Update the amplifier's firmware.

PERFORMANCE OPTIMIZATION WIZARD PROGRAM USER'S GUIDE

Computer Requirements

Operating System: Windows XP
USB Port : 5-wire USB 1.1 connector
Hard drive: 5 Megabytes

Required Speaker Connections
To connect your computer to the speaker, you have two options:
1. USB port
2. Ethernet jack with network decoder card (sold separately).

LC*i*-IP PERFORMANCE OPTIMIZATION WIZARD PROGRAM

Polk Audio provides the Performance Optimization Wizard on CD-ROM. This program enables you to optimize the performance characteristics of Polk Audio LC*i*-IP speakers specifically to their location in a given room and to the physical characteristics of that room.

You can also download the Performance Optimization Wizard from our website (www.polkaudio.com).

- For maximum accuracy, answer as many questions as possible. Do not "skip" questions unless the information is unavailable.

- Should you have any questions before or during the setup process, please feel free to contact Polk Audio Installer Support Services at 1-800-377-POLK.

Walking Through the Room Optimization Choices

- This program can be used for installing and setting up in-wall or in-ceiling LC*i*-IP speakers and asks a series of basic configuration questions and a series of questions about the room environment (figure1).

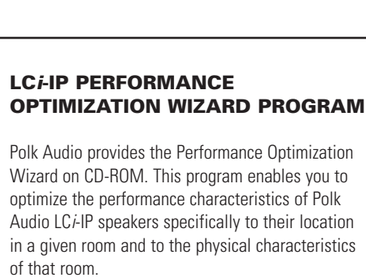


Figure 1

- Depending on the speaker you're installing, its location and the room, you may be asked for a series of measurements, including the height of the listening room's ceiling, distances from walls, ceiling and floor to the speaker(s), as well as vertical and horizontal angles of speakers relative to the listening area. You may also be asked to provide measurements for the height, width, depth and center of the listening area (figure 2).

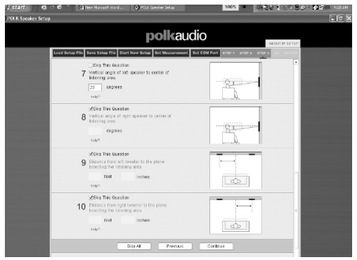


Figure 2

Note: Most measurements will be taken from the center of the tweeters. To take these measurements, you will need: a tape measure and a protractor. You may also be able to determine the necessary measurements from a blueprint or floorplan.

Figure 3

- Included with each setup question and physical measurement, there is a help link that defines a particular question or measurement in more detail. Click on the link to call up the help screen (figure 3).

Figure 4

- An "Error Message" will be displayed if you do not supply information. For some requested measurements you may not be able to supply the requested information, and you may check the appropriate "skip question" box. When an "skip question" box is checked, no error message is displayed (figure 4).

Making A Speaker Configuration File Offsite

To help you work more efficiently and save time, you can make a speaker configuration file offsite. You will need to have installed the speakers, be familiar with the room environment and have taken the necessary measurements. Once on site, you can download the file and audition the system, making any final EQ adjustments as deemed necessary.

Auditioning and Final EQ Adjustments

Adjusting the EQ gives you the opportunity to fine tune the system's performance (figure 5). You should be in the center of the listening area, with the volume set at an appropriate level. Play audio through the system, and listen for problems such as:

Muddy vocals or instruments
Too bright/Too dull
"Boomy" sounds
Thin sounding bass
"Harsh" vocals or instruments

If the system sounds good,no changes are recommended. When you have finished listening, press "Finish."

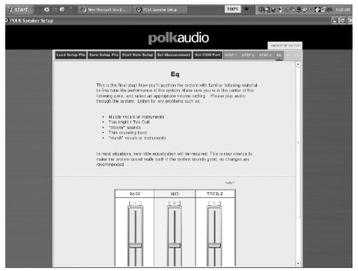


Figure 5
Important Note: Always save your newly configured settings to the DSP.

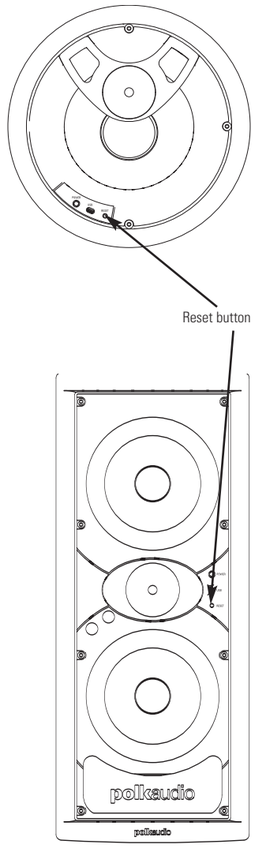
INTERPRETING THE LEDS

An LED indicator tells you the status of each speaker:
An ORANGE LED indicates the speaker is in STANDBY.
A GREEN LED indicates the speaker is ON.
A RED LED indicates the speaker is in PROTECTION mode.

Reset Button Reminder

Engage the RESET BUTTON whenever you:
- Reconfigure speaker switch settings.
- Update the firmware on the network decoder card.
- Update the amplifier's firmware.

Note: Each speaker has a RESET BUTTON, which is located on the front of the speaker.



FAQs

Will the speakers work with my current MRAV system?
Please check with your MRAV Authorized Installer.

Is there any inherent delay in the system?
Inherent delay for each speaker is based on position of configuration switch (CFG). With CFG switch set to "A," the delay from input to speaker output is 2.5 milliseconds; with CFG switch set to "B," delay is 4.4 milliseconds. There is no delay from speaker to speaker. Any other delay is from the AV system.

How much heat can these speakers take?
The ambient operating temperature range of the LC*i*-IP speakers is 0-50C (32-122F).

What about the amplifier and wall insulation?
The amplifier should never come into contact with any wall insulation.

What are the switch settings on the back of the speaker's baffle for?
These settings affect the configuration of the speakers (see page 5).

Do I need to run the Performance Optimization Wizard in order to listen to the speakers?
No. The speakers are loaded with factory default settings. These speakers were designed to sound great right out of the box. If you want them to sound better or configure them to be used with your MRAV, then you will need to use the software.

Can I run analog lines to each speaker but use the COMM line to control everything?
Yes, this is a supported configuration (see page 40).

What gauge wire do you recommend for the power connections?
We recommend 14 gauge wire. You may use 16 gauge, but at a cost to performance.

If I install a LC80*i*-IP in the ceiling but don't connect via a network decoder card, can I use a wireless USB connector to control it from my computer?
No. The speaker is not an USB host. A wired connection to a PC is required.

What is the reset button for?
Press the RESET button whenever you reconfigure the speaker switch settings, update the firmware on the network decoder card or update the amplifier's firmware.

What happens to the speaker settings if I temporarily lose power?
If you are using the default settings or saved any settings to the DSP from the POW, they will be present in the system when you power back up. We recommend that you also save your POW settings by storing the configuration file on your hard drive. This is an available option inside of the Performance Optimization Wizard program.

Can I install a speaker under a water source, such as putting an LC80*i*-IP in a ceiling under a bathroom tub?
We do not recommend installing any speaker near a water source because of potential leaks.

Can I mount LC*i*-IP speakers in an external wall?
Yes, as long as the wall's insulation doesn't come in contact with the amplifier.

Can I mount LC*i*-IP speakers so that they are outside?
No. These speakers are for indoor use only.

Whose power supply can I use?
You can use the Polk Audio SPS-1 power supply or a similar power supply such as an available NetStreams power supply. Be aware that the SPS-1 can power both the LC265*i*-IP and LC80*i*-IP speakers. Be sure to check the voltage and current ratings on third party power supplies to achieve optimal performance.

Can I put the SPS-1 power supply on a power circuit with other devices, or does it need its own circuit?
The power supply does not need to be on its own circuit, but ensure that you are not exceeding the current draw limitations of the circuit.

Should I use a surge protector?
Yes. We recommend that you always use a surge protector.

TROUBLESHOOTING

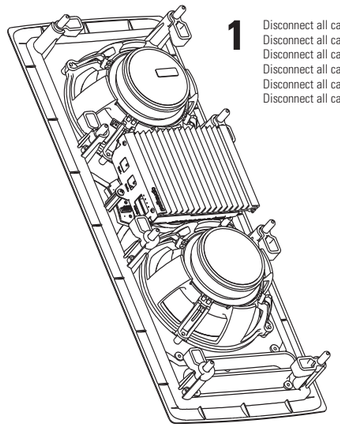
Problem	Possible Reason(s)	Solution
No audio	Audio signal is not connected to the speaker.	Make sure that the speaker is connected to the audio source using RCA cables or a RJ45 equipped Cat-5 cable. Make sure that the configuration switches are set appropriately.
	The speaker's software is not configured to work with the MRAV.	Make sure to use the Performance Optimization Wizard when connecting to an IP-based network, such as NetStreams' DigiLinX network. Also make sure to use any set-up software required for configuring the MRAV.
	The speaker's configuration switches are not set correctly.	Check the current hook-up configuration against the possibilities listed on page 5 to make any necessary adjustments. Once completed, make sure to press the RESET button on the CONTROL speaker, located on the speaker's front baffle.
	No power.	Make sure that the power cable is connected to both the power supply and the speaker and that the connectors are fully inserted on both ends. Make sure that the power supply is on and that there are no kinks in the power wire (i.e. it is not broken).
	The MRAV does not recognize the speaker.	Make sure to use any set-up software required for configuring the MRAV. Also make sure that the appropriate network decoder card has been installed into the CONTROL speaker if audio is coming to the speaker using the speaker's NETWORK connection.
Speaker is playing the wrong audio channel.	The speaker's CHANNEL switch is in the wrong position.	Set the CHANNEL switch to the opposite position and press the RESET button on the front baffle of the CONTROL speaker.
	The wiring for the speaker is incorrect.	Make sure that the cable connecting the speaker to the MRAV is sending the desired audio channel.
No control	Loose or bad NETWORK connection.	Make sure that the RJ45 equipped Cat-5 cable has been tested for continuity. The pin-out for both ends of the cable should match.
	USB connection is bad.	If you intend to use the USB connection for control, make sure it is plugged into the speaker and your computer.
No power	Loose or bad POWER connection.	Make sure that the power cable is connected to both the power supply and the speaker and that the connectors are fully inserted on both ends.
	Power supply's circuit might be off.	Check first to make sure the power supply's circuit's fuse is ON. Next, make sure that the power supply is on and that there are no kinks in the power wire (i.e. it is not broken).
Hum on audio	Grounding problem.	Make sure that there are no ground-loops at the audio source. Also make sure that the power supply that is being used has a single-ended output.
	Audio signal cable is not shielded and is routed next to a power cable.	Check all wired connections and make sure that the audio signal cable is shielded properly. If it is not, either replace the cable or make sure that the cable is at least 6-inches away from any power cables as the frequency (50 or 60 Hz) of the AC power source will be audible at the speakers.
Poor sound	Performance Optimization Wizard has not been used.	These speakers have been loaded with a factory preset EQ. While the EQ provides high performance in most situations, you are strongly encouraged to use the Performance Optimization Wizard. This will modify the EQ of the speakers to the installed location and optimize the performance of the speakers.
	Wrong or inaccurate values have been entered into the Performance Optimization Wizard.	Make sure that the values entered into the Performance Optimization Wizard are as accurate as possible. A summary page is shown once the wizard is completed. Check over the answers in the summary page to make sure they are correct.
	Performance Optimization Wizard is malfunctioning.	Using the Performance Optimization Wizard, restore the speaker's factory default EQ settings and save them to the speaker's DSP. Then, please contact our Customer Service department at 1-800-377-POLK for further information.
	Audio source is of bad quality.	It is quite possible that the audio source or some where in the audio chain, there is something that is malfunctioning or is performing poorly. Due to the high quality and revealing nature of the LC*i*-IP product, it may be necessary to check the various components and cables of the MRAV for conflicts or issues.

TROUBLESHOOTING CONTINUED

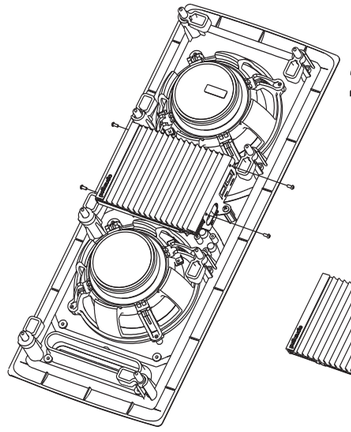
Problem	Possible Reason(s)	Solution
No LED	Room is too bright.	The LED found on the front baffle of the speaker is intentionally soft as to not distract the user during operation. Make sure the speaker grill is removed and look closely at the LED. If the power connections are correct, the LED should be ON.
	Loose or bad power connection.	Refer to the "No Power" section of this table.
	Defective LCi-IP product.	Double-check the wiring for the speaker. If all looks good, please contact our Customer Service department at 1-800-377-POLK for further instructions.
LED is Red	Short circuit exists.	Check all cables and make sure there are no stray strands of copper or other conductive material that are inadvertently connecting two conductors that should not be electrically connected.
	Amplifier is overheating.	Check to make sure that no insulation is coming in contact with the speaker's amplifier. Next, make sure that no additional heat source is located near the speaker. If the amplifier continues to overheat, please contact our Customer Service department at 1-800-377-POLK for further instructions.

TROUBLESHOOTING FOR THE PERFORMANCE OPTIMIZATION WIZARD

Problem	Possible Reason(s)	Solution
Error message during installation.	Firewall or antivirus software is causing installation problems.	Make sure to exit all programs and disable all firewall or antivirus software prior to running the installation program.
Microsoft® Windows® XP crashes.	Possible Microsoft® Windows® XP bug.	Make sure that the computer running the software is up-to-date and has all appropriate fixes and patches as recommended by Microsoft®.
Computer crashes when you try to run program.	Incompatible Operating System.	This program can only work using Microsoft® Windows® XP. It may not be compatible with Emulators.
Using the software is not changing the way the speakers sound.	The software is working offline.	Make sure that the computer using the software is connected to the CONTROL speaker. Next, restart the software program. If the program asks you if you would like to work offline, you might either have a conflict in your port configurations or the correct drivers may have not been loaded.



1 Disconnect all cables.
Disconnect all cables.
Disconnect all cables.
Disconnect all cables.
Disconnect all cables.
Disconnect all cables.



2 Remove the (4) Torx screws (size T-10) holding the heat sink to the amp housing. Set the screws safely aside.
Remove the (4) Torx screws (size T-10) holding the heat sink to the amp housing. Set the screws safely aside.
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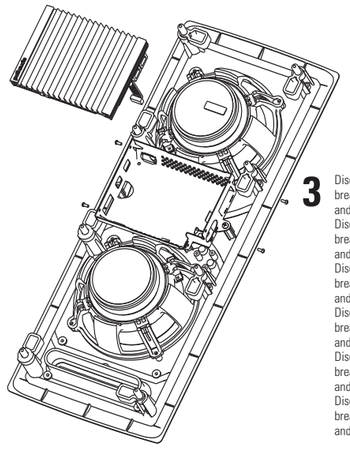

3 Disconnect the ribbon cable from the break-out board. Remove the amplifier and loose cables from the amp housing.
Disconnect the ribbon cable from the break-out board. Remove the amplifier and loose cables from the amp housing.
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Disconnect the ribbon cable from the break-out board. Remove the amplifier and loose cables from the amp housing.

4 Turn the amplifier over and remove the two screws from the two metal standoffs located on the PCB.
Turn the amplifier over and remove the two screws from the two metal standoffs located on the PCB.
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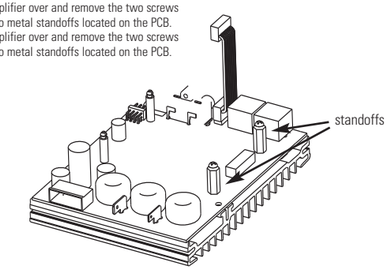

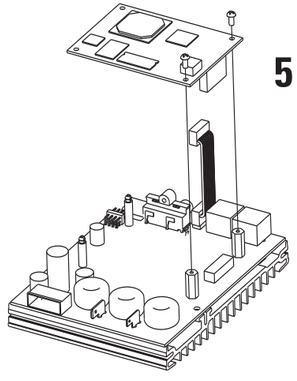

5 Install the network decoder card on the standoffs, mating the two sides of the 40-pin connector. Press down and ensure that the card snaps onto the two plastic standoffs.
Install the network decoder card on the standoffs, mating the two sides of the 40-pin connector. Press down and ensure that the card snaps onto the two plastic standoffs.
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6 Secure the network decoder card by reinserting the two standoff screws into the two metal standoffs.
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7 Reinstall the amplifier onto the amplifier chassis (reversing steps 1, 2 & 3).
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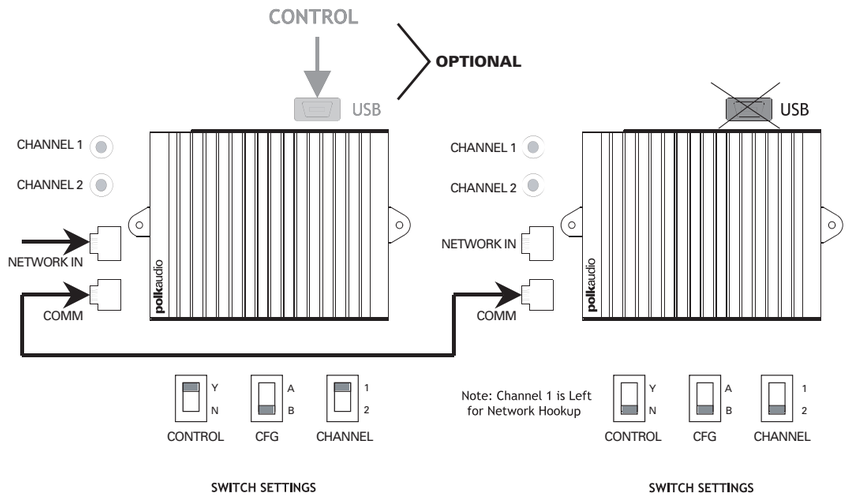
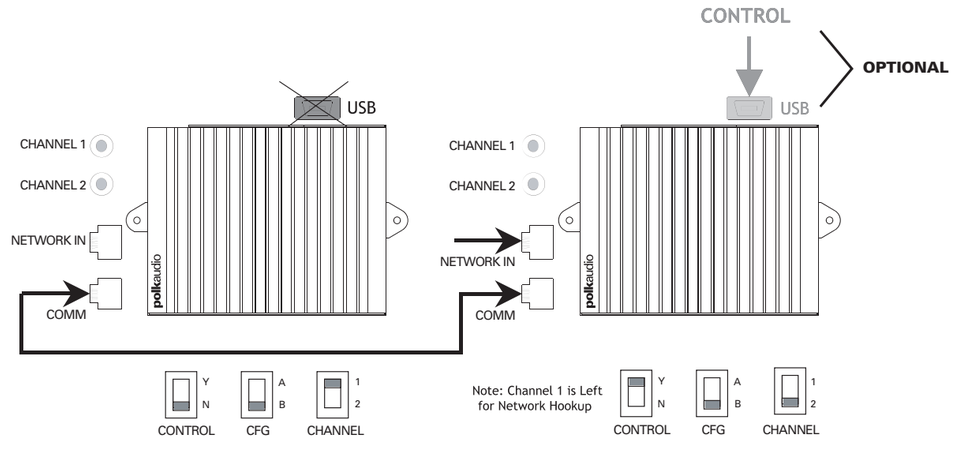
Hookup 1a: NETWORK PAIR (Control on Left)



SWITCH SETTINGS

SWITCH SETTINGS

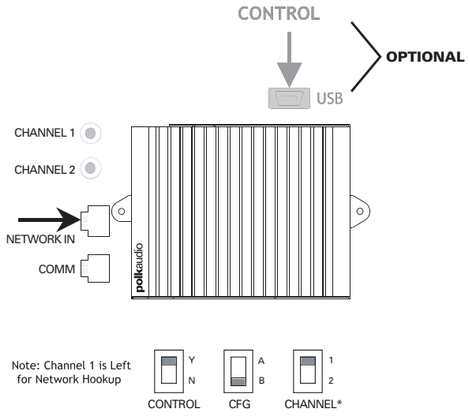
Hookup 1b: NETWORK PAIR (Control on Right)



SWITCH SETTINGS

SWITCH SETTINGS

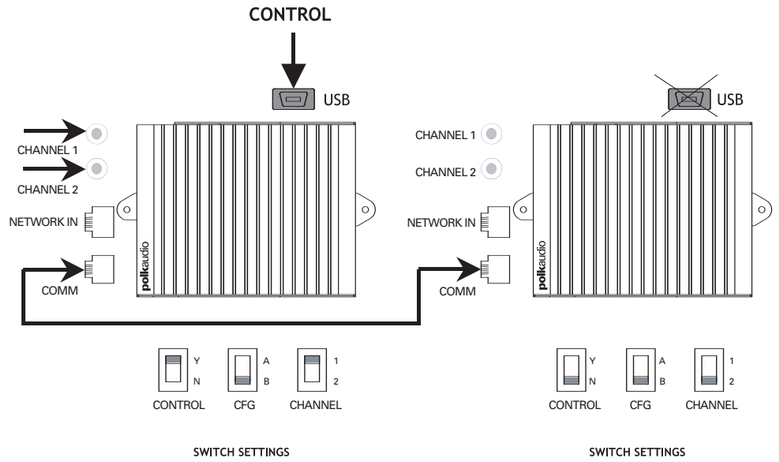
Hookup 2: NETWORK (Independent Control)



SWITCH SETTINGS

* Channel can be 1 or 2 depending on configuration.

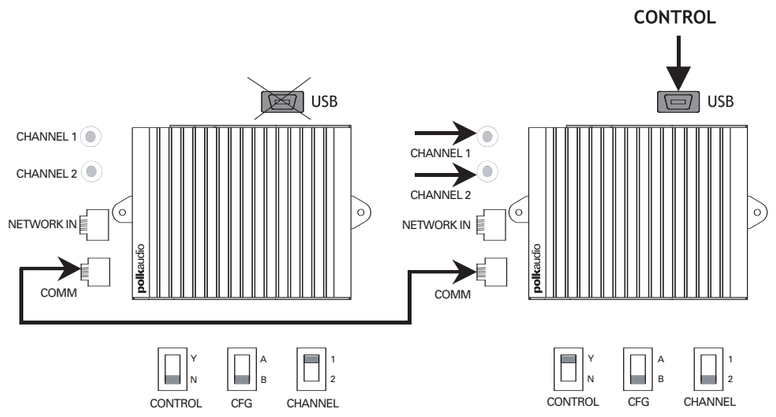
Hookup 3a: ANALOG PAIR (Control on Left)



SWITCH SETTINGS

SWITCH SETTINGS

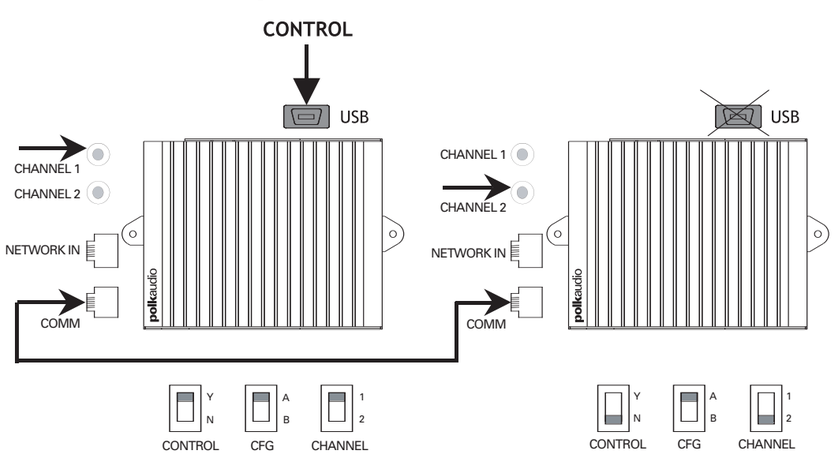
Hookup 3b: ANALOG PAIR (Control on Right)



SWITCH SETTINGS

SWITCH SETTINGS

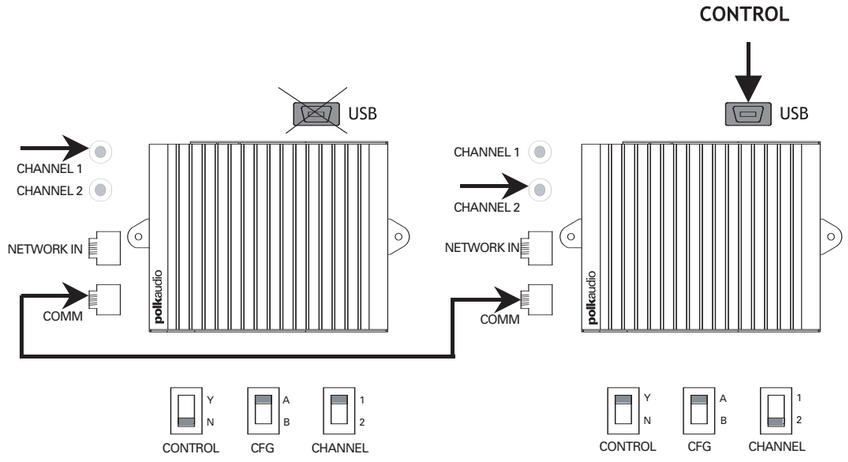
Hookup 4a: ANALOG PAIR (Control on Left)



SWITCH SETTINGS

SWITCH SETTINGS

Hookup 4b: ANALOG PAIR (Control on Right)

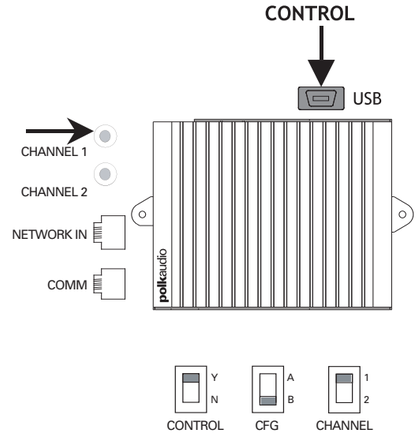


SWITCH SETTINGS

SWITCH SETTINGS

CENTER CHANNEL

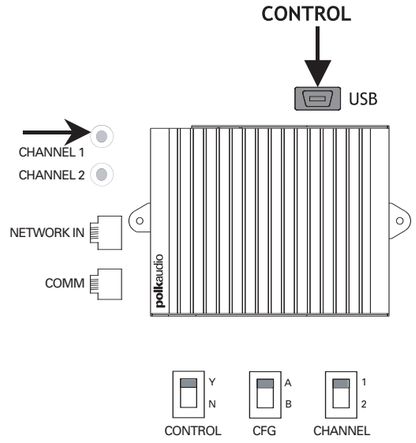
Hookup 5a: ANALOG (Independent Control When Used with Hookup 3a or 3b)



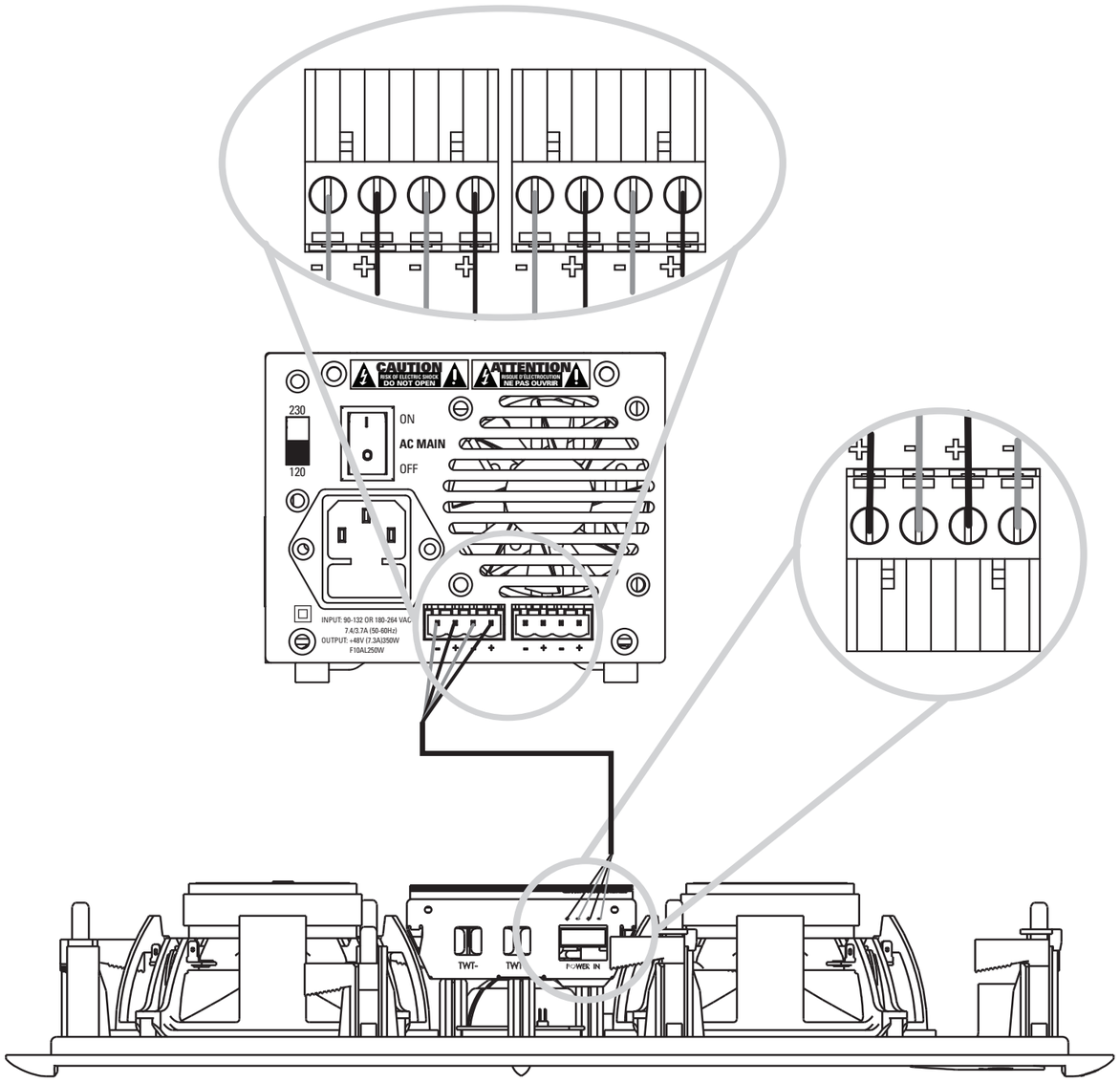
SWITCH SETTINGS

CENTER CHANNEL

Hookup 5b: ANALOG (Independent Control When Used with Hookup 4a or 4b)



SWITCH SETTINGS



This hookup works for both the LC265*i*-IP and the LC80*i*-IP.
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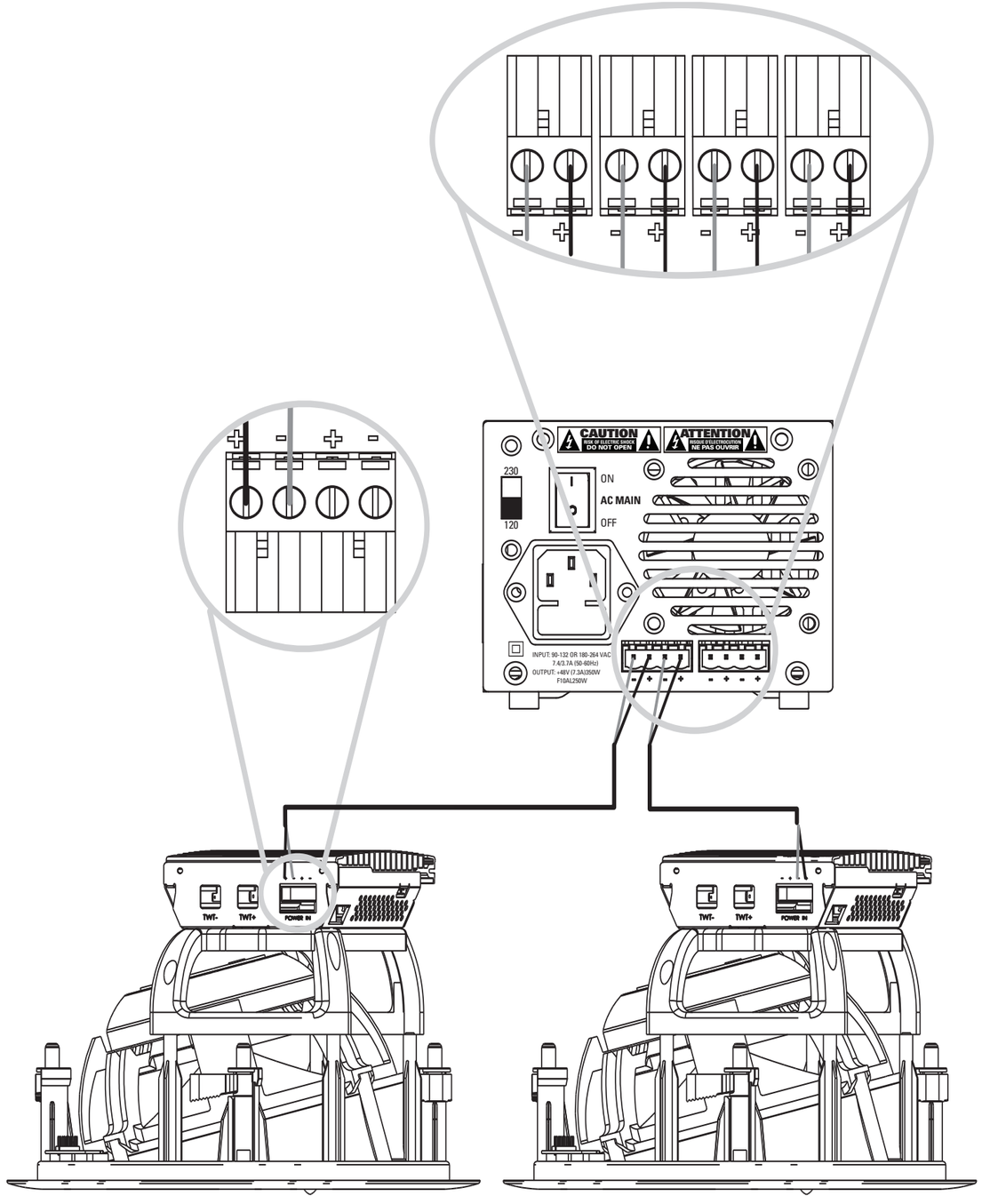

This hookup works only for the LC80*i*-IP.
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NOTES

LIMITED WARRANTY

Polk Audio, Inc., warrants to the original retail purchaser only. This warranty will terminate automatically prior to its stated expiration if the original retail purchaser sells or transfers the Product to any other party.

Polk Audio, Inc., warrants, to the original retail purchaser only, that the LC*i*-IP Speaker on this Polk Audio Loudspeaker Product will be free from defects in material and workmanship for a period of five (5) years from the date of original retail purchase from a Polk Audio Authorized Dealer.

Furthermore, Polk Audio, Inc., warrants, to the original retail purchaser only, that any AMPLIFIER OR OTHER ELECTRONIC COMPONENT that may be included in this Polk Audio Loudspeaker Product will be free from defects in material and workmanship for a period of three (3) years from the date of original retail purchase from a Polk Audio Authorized Dealer.

To allow Polk Audio to offer the best possible warranty service, please register your new product online at: www.polkaudio.com/registration or call Polk customer service 800-377-7655 in the USA and Canada (outside the USA: 410-358-3600) within ten (10) days of the date of original purchase. Be sure to keep your original purchase receipt.

Defective Products must be shipped, together with proof of purchase, prepaid insured to the Polk Audio Authorized Dealer from whom you purchased the Product, or to the Factory at 2550 Britannia Boulevard, Suite A, San Diego, California 92154. Products must be shipped in the original shipping container or its equivalent; in any case the risk of loss or damage in transit is to be borne by you. If upon examination at the Factory or Polk Audio Authorized Dealer it is determined that the unit was defective in materials or workmanship at any time during this Warranty period, Polk Audio or the Polk Audio Authorized Dealer will, at its option, repair or replace this Product at no additional charge, except as set forth below. All replaced parts and Products become the property of Polk Audio. Products replaced or repaired under this warranty will be returned to you, within a reasonable time, freight prepaid.

This warranty does not include service or parts to repair damage caused by accident, disaster, misuse, abuse, negligence, inadequate packing or shipping procedures, commercial use, voltage inputs in excess of the rated maximum of the unit, cosmetic appearance of cabinetry not directly attributable to defect in materials or workmanship, or service, repair, or modification of the Product which has not been authorized or approved by Polk Audio. This warranty shall terminate if the Serial number on the Product has been removed, tampered with or defaced.

This warranty is in lieu of all other expressed Warranties. If this Product is defective in materials or workmanship as warranted above, your sole remedy shall be repair or replacement as provided above. In no event will Polk Audio, Inc. be liable to you for any incidental or consequential damages arising out of the use or inability to use the Product, even if Polk Audio, Inc. or a Polk Audio Authorized Dealer has been advised of the possibility of such damages, or for any claim by any other party. Some states do not allow the exclusion or limitation of consequential damages, so the above limitation and exclusion may not apply to you.

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Les produits défectueux doivent être expédiés, avec une preuve d'achat, francs de port et assurés, au revendeur agréé Polk Audio de qui vous avez acheté le produit, ou à l'usine Polk Audio, 2550 Britannia Boulevard, Suite A, San Diego, California 92154.

Les produits doivent être expédiés dans leur carton d'expédition original ou dans un contenant équivalent. Le propriétaire doit assumer tout risque de perte ou de dommage en transit.

Si, suite à l'examen du produit à l'usine Polk ou chez le marchand agréé Polk Audio, il est déterminé que la défectuosité est imputable aux matériaux d'origine ou à la main d'oeuvre au cours de la période de la garantie spécifiée, Polk Audio ou le revendeur Polk Audio, à sa guise, réparera ou remplacera le produit sans frais additionnels et selon les conditions décrites ci-dessous.

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